



***COMMONWEALTH of VIRGINIA***  
***DEPARTMENT OF ENVIRONMENTAL QUALITY***

**Permit No. VA0002313**

Effective Date: March 1, 2015  
Modification Date:  
Expiration Date: February 29, 2020

**AUTHORIZATION TO DISCHARGE UNDER THE  
VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM  
AND  
THE VIRGINIA STATE WATER CONTROL LAW**

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I - Effluent Limitations and Monitoring Requirements, and Part II – Conditions Applicable To All VPDES Permits, as set forth herein.

Owner: **VPGC, LLC**  
Facility Name: **VPGC, LLC - Hinton**  
County: **Rockingham**  
Facility Location: **6349 Rawley Pike, Hinton**

The owner is authorized to discharge to the following receiving stream:

Stream: Muddy Creek (Outfall 001)  
War Branch (Outfalls 002, 005, 006, 007, 008 and 009)  
River Basin: Potomac  
River Subbasin: Shenandoah  
Section: 5  
Class: IV  
Special Standards: pH

B. Keith Fowler, Deputy Regional Director  
Valley Regional Office

Date:

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, or until three consecutive monthly average flows equal or exceed 1.10 MGD, whichever occurs first, the permittee is authorized to discharge from Outfall 001 (combined discharge from internal Outfalls 101 and 102).

This discharge shall be limited and monitored as specified below:

	<u>EFFLUENT CHARACTERISTICS</u>		<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>		<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) <sup>a</sup>	NL		NA	NA	NL		1/Month	Calculated
pH (standard units)	NA		NA	6.5	9.0		1/Day	Grab
BOD <sub>5</sub> <sup>b,d</sup>	16 mg/L	67 kg/d	NA	NA	26 mg/L	110 kg/d	2/Month	24 HC
Total Suspended Solids <sup>b</sup>	19 mg/L	79 kg/d	NA	NA	30 mg/L	120 kg/d	1/Month	24 HC
Total Nitrogen <sup>b</sup>	103 mg/L	430 kg/d	NA	NA	147 mg/L	610 kg/d	2/Month	Calculated
Dissolved Oxygen (mg/L)	NA		NA	6.0	NA		1/Day	Grab
TKN (as N) <sup>b</sup>	6.9 mg/L	29 kg/d	NA	NA	14 mg/L	58 kg/d	1/Week	24 HC
WET Chronic NOEC <i>P. promelas</i> (TU <sub>c</sub> ) <sup>c</sup>	NA		NA	NA	2.17		1/Year	24 HC
WET Chronic NOEC <i>C. dubia</i> (TU <sub>c</sub> ) <sup>c</sup>	NA		NA	NA	2.17		1/3 Months	24 HC
Nitrate (as N)	15 mg/L	61 kg/d	NA	NA	30 mg/L	120 kg/d	2/Month	24 HC

NL = No Limitation, monitoring required

NA = Not Applicable

24 HC = 24-Hour Composite

2/Month = 2 samples taken during the calendar month, no less than 7 days apart

1/3 Months = Sampling each calendar quarter with the results submitted with the DMR due January 10<sup>th</sup>, April 10<sup>th</sup>, July 10<sup>th</sup> and October 10<sup>th</sup> of each year

1/Year = Annual sampling with the results submitted with the DMR due January 10<sup>th</sup> of each year

- a. The above effluent limitations and monitoring requirements are based on a flow of 1.10 MGD.
- b. See Part I.B for additional monitoring and reporting instructions.
- c. See Part I.C for additional monitoring and reporting instructions.
- d. See Part I.D.13. for additional instructions regarding effluent monitoring frequencies.
- e. In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010009, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.
- f. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period following three consecutive monthly average flows which equal or exceed 1.10 MGD, and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 001 (combined discharge from internal Outfalls 101 and 102).

This discharge shall be limited and monitored as specified below:

	<u>EFFLUENT CHARACTERISTICS</u>		<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>		<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>		<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) <sup>a</sup>	NL		NA	NA	NL		1/Month	Calculated
pH (standard units)	NA		NA	6.5	9.0		1/Day	Grab
BOD <sub>5</sub> <sup>b,d</sup>	14 mg/L	80 kg/d	NA	NA	26 mg/L	150 kg/d	2/Month	24 HC
Total Suspended Solids <sup>b</sup>	14 mg/L	80 kg/d	NA	NA	28 mg/L	160 kg/d	1/Month	24 HC
Total Nitrogen <sup>b</sup>	103 mg/L	590 kg/d	NA	NA	147 mg/L	840 kg/d	2/Month	Calculated
Dissolved Oxygen (mg/L)	NA		NA	6.0	NA		1/Day	Grab
TKN (as N) <sup>b</sup>	6.9 mg/L	40 kg/d	NA	NA	14 mg/L	80 kg/d	1/Week	24 HC
WET Chronic NOEC <i>P. promelas</i> (TU <sub>c</sub> ) <sup>c</sup>	NA		NA	NA	1.96		1/Year	24 HC
WET Chronic NOEC <i>C. dubia</i> (TU <sub>c</sub> ) <sup>c</sup>	NA		NA	NA	1.96		1/3 Months	24 HC
Nitrate (as N)	11 mg/L	61 kg/d	NA	NA	22 mg/L	130 kg/d	2/Month	24 HC

*NL = No Limitation, monitoring required*

*NA = Not Applicable*

*24 HC = 24-Hour Composite*

*2/Month = 2 samples taken during the calendar month, no less than 7 days apart*

*1/3 Months = Sampling each calendar quarter with the results submitted with the DMR due January 10<sup>th</sup>, April 10<sup>th</sup>, July 10<sup>th</sup> and October 10<sup>th</sup> of each year*

*1/Year = Annual sampling with the results submitted with the DMR due January 10<sup>th</sup> of each year*

- The above effluent limitations and monitoring requirements are based on a flow of 1.52 MGD.
- See Part I.B for additional monitoring and reporting instructions.
- See Part I.C for additional monitoring and reporting instructions.
- See Part I.D.13 for additional instructions regarding effluent monitoring frequencies.
- In addition to any Total Nitrogen or Total Phosphorus concentration limits (or monitoring requirements without associated limits) listed above, this facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010009, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia.
- There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

3. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 101 (discharge from sewage treatment works prior to mixing with Outfall 102 (industrial wastewater treatment plant final discharge)).

This discharge shall be limited and monitored as specified below:

	<u>EFFLUENT CHARACTERISTICS</u>		<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>		<u>Weekly Average</u>		<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) <sup>a</sup>	NL		NA		NA	NL	1/Month	Estimate
pH (standard units)	NA		NA		6.0	9.0	1/Year	Grab
E. coli (N/100 mL)	126						4/Month	
	Geometric Mean		NA		NA	NA	10 a.m. – 4 p.m.	Grab
BOD <sub>5</sub> <sup>b</sup>	30 mg/L	2.3 kg/d	45 mg/L	3.4 kg/d	NA	NA	1/Month	Grab
Total Suspended Solids <sup>b</sup>	30 mg/L	2.3 kg/d	45 mg/L	3.4 kg/d	NA	NA	1/Month	Grab

NL = No Limitation, monitoring required

NA = Not Applicable

1/Year = Annual sampling with the results submitted with the DMR due January 10<sup>th</sup> each year

4/Month = 4 samples taken monthly, with at least 1 sample taken each calendar week

- a. The design flow of Outfall 101 is 0.020 MGD. See Part I.D.1 for additional requirements related to facility flows.  
b. See Part I.B for additional monitoring and reporting instructions.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

4. During the period beginning with the permit's effective date and lasting until the permit's expiration date, or until three consecutive monthly average flows equal or exceed 1.08 MGD, whichever occurs first, the permittee is authorized to discharge from Outfall 102 (final discharge from industrial wastewater treatment plant prior to mixing with Outfall 101).

This discharge shall be limited and monitored as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) <sup>a</sup>	NL	NA	NA	NL	Continuous	TIRE
pH (SU)	NA	NA	6.0	9.0	1/Year	Grab
Fecal Coliform (N/100 mL)	NA	NA	NA	400 Geometric Mean	1/Year	Grab
Oil and Grease (as HEM) <sup>b,c</sup>	8.0 mg/L    33 kg/d	NA	NA	14 mg/L    57 kg/d	1/Month	Grab
E. coli (N/100 mL)	13 Geometric Mean	NA	NA	NA	3/Week 10 a.m. – 4 p.m.	Grab
TKN (as N)(mg/L) <sup>b</sup>	NL	NA	NA	NL	1/Year	24 HC
Nitrite-N + Nitrate-N (mg/L) <sup>b</sup>	NL	NA	NA	NL	1/Year	24 HC
Total Nitrogen <sup>b,d</sup>	103 mg/L    420 kg/d	NA	NA	147 mg/L    600 kg/d	1/Year	Calculated
Ammonia-N (mg/L) <sup>b</sup>	4.0	NA	NA	8.0	1/Year	24 HC
Total Suspended Solids <sup>b</sup>	20 mg/L    82 kg/d	NA	NA	30 mg/L    120 kg/d	1/Year	24 HC
BOD <sub>5</sub> <sup>b</sup>	16 mg/L    65 kg/d	NA	NA	26 mg/L    110 kg/d	1/Year	24 HC
Total Phosphorus (mg/L) <sup>b</sup>	NL	NA	NA	NA	2/Month	24 HC
Total Phosphorus – Year to Date (mg/L) <sup>b</sup>	NL	NA	NA	NA	1/Month	Calculated
Total Phosphorus – Calendar Year (mg/L) <sup>b</sup>	1.85	NA	NA	NA	1/Year	Calculated

NL = No Limitation, monitoring required

NA = Not Applicable

TIRE = Totalizing, Indicating and Recording Equipment

1/Year = Annual sampling with the results submitted with the DMR due January 10<sup>th</sup> of each year

2/Month = 2 samples taken during the calendar month, no less than 7 days apart

3/Week = 3 samples taken during the calendar week, no less than 48 hours apart

a. The design flow of Outfall 102 is 1.5 MGD. The above effluent limitations and monitoring requirements are based on a permitted flow of 1.08 MGD.

b. See Part I.B for additional monitoring and reporting instructions.

c. Oil and Grease shall be measured as n-hexane extractable material.

d. Total Nitrogen, which is the sum of TKN and Nitrite-N + Nitrate-N, shall be derived from the results of those tests.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

5. During the period following three consecutive monthly average flows which equal or exceed 1.08 MGD and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 102 (final discharge from industrial wastewater treatment plant prior to mixing with Outfall 101).

This discharge shall be limited and monitored as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD) <sup>a</sup>	NL	NA	NA	NL	Continuous	TIRE
pH	NA	NA	6.0	9.0	1/Year	Grab
Fecal Coliform (N/100 mL)	NA	NA	NA	400 Geometric Mean	1/Year	Grab
TKN (as N)(mg/L) <sup>b</sup>	NL	NA	NA	NL	1/Year	24 HC
Nitrite-N + Nitrate-N (mg/L) <sup>b</sup>	NL	NA	NA	NL	1/Year	24 HC
Total Nitrogen <sup>b,d</sup>	103 mg/L    580 kg/d	NA	NA	147 mg/L    830 kg/d	1/Year	Calculated
Ammonia-N (mg/L) <sup>b</sup>	4.0	NA	NA	8.0	1/Year	24 HC
Oil and Grease (as HEM) <sup>b,c</sup>	8.0 mg/L    45 kg/d	NA	NA	14 mg/L    79 kg/d	1/Month	Grab
E. coli (N/100 mL)	9 Geometric Mean	NA	NA	NA	3/Week 10 a.m. – 4 p.m.	Grab
Total Suspended Solids <sup>b</sup>	20 mg/L    110 kg/d	NA	NA	30 mg/L    170 kg/d	1/Year	24 HC
BOD <sub>5</sub> <sup>b</sup>	16 mg/L    91 kg/d	NA	NA	26 mg/L    150 kg/d	1/Year	24 HC
Total Phosphorus (mg/L) <sup>b</sup>	NL	NA	NA	NA	2/Month	24 HC
Total Phosphorus – Year to Date (mg/L) <sup>b</sup>	NL	NA	NA	NA	1/Month	Calculated
Total Phosphorus – Calendar Year (mg/L) <sup>b</sup>	1.85	NA	NA	NA	1/Year	Calculated

NL = No Limitation, monitoring required

NA = Not Applicable

TIRE = Totalizing, Indicating and Recording Equipment

1/Year = Annual sampling with the results submitted with the DMR due January 10<sup>th</sup> of each year

2/Month = 2 samples taken during the calendar month, no less than 7 days apart

3/Week = 3 samples taken during the calendar week, no less than 48 hours apart

- The design flow of Outfall 102 is 1.5 MGD. See Part I.D.1 for additional requirements related to facility flows.
- See Part I.B for additional monitoring and reporting instructions.
- Oil and Grease shall be measured as n-hexane extractable material.
- Total Nitrogen, which is the sum of TKN and Nitrite-N + Nitrate-N, shall be derived from the results of those tests.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

6. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfalls 002 and 005 (stormwater not exposed to industrial activity) and Outfalls 006 and 007 (groundwater diversion from under the Flow Equalization Basin).

This discharge shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS

DISCHARGE LIMITATIONS

MONITORING REQUIREMENTS

Monthly Average

Weekly Average

Minimum

Maximum

Frequency

Sample Type

Outfalls 002 and 005 shall contain only stormwater not exposed to industrial activity.

Outfalls 006 and 007 shall contain only uncontaminated water diverted from under the Flow Equalization Basin.

There shall be no discharge of process wastewater from Outfalls 002, 005, 006, or 007. No monitoring of these outfalls is required.

- a. See Part I.E for additional requirements relating to stormwater management.
- b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

7. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 008 (well water bypass and raw water storage tank emergency overflow).

This discharge shall be limited and monitored as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow (MGD)	NA	NA	NA	NL	1/ Month	Estimate
TSS (mg/L) <sup>a</sup>	NL	NA	NA	NL	1/Month	Grab
Total Residual Chlorine (mg/L) <sup>a,c</sup>	0.003	NA	NA	0.007	1/ Day	Grab

*NL = No Limitation, monitoring required*

*NA = Not Applicable*

- a. See Part I.B for additional monitoring and reporting instructions.
- b. Under normal operating conditions, the only discharge to Outfall 008 will be from well water that bypasses treatment and storage. This water contains no chlorine.
- c. The raw water storage tanks contain chlorinated water for use in the facility. Monitoring for Total Residual Chlorine is required if there is a discharge from the emergency overflow pipes located on the side of each storage tank.



A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

8. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from Outfall 009 (stormwater runoff associated with industrial activity).

This discharge shall be limited and monitored as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Total Suspended Solids (mg/L) <sup>a</sup>	NA	NA	NA	NL	1/6 Months	Grab
TKN (mg/L) <sup>a</sup>	NA	NA	NA	NL	1/6 Months	Grab
Nitrite-N + Nitrate-N (mg/L) <sup>a</sup>	NA	NA	NA	NL	1/6 Months	Grab
Total Nitrogen (mg/L) <sup>a,b</sup>	NA	NA	NA	NL	1/6 Months	Calculated
Total Phosphorus (mg/L) <sup>a</sup>	NA	NA	NA	NL	1/6 Months	Grab

*NL = No Limitation, monitoring required*

*NA = Not Applicable*

*1/6 Months = Semiannual sampling (January 1 – June 30 and July 1 – December 31) with the results submitted with the DMR due January 10<sup>th</sup> and July 10<sup>th</sup> of each year until data from a minimum of four semiannual samples have been submitted*

- See Part I.D.15 for additional monitoring and reporting instructions.
- Total Nitrogen, which is the sum of TKN and Nitrite-N + Nitrate-N, shall be derived from the results of those tests.
- See stormwater monitoring requirements in Part I.E.1.a and Part I.E.1.b.

**B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - ADDITIONAL INSTRUCTIONS**

1. The quantification levels (QLs) shall be less than or equal to the following concentrations:

<u>Effluent Characteristic</u>	<u>QL</u>
BOD <sub>5</sub>	2 mg/L
Total Suspended Solids	1.0 mg/L
Ammonia-N	0.20 mg/L
Oil & Grease	5.0 mg/L
TKN	0.5 mg/L
TRC	0.10 mg/L

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II.A of this permit.

2. Compliance Reporting

- a. Monthly Average (Outfalls 001, 008, 101, and 102) – Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in Part I.B.1 shall be determined as follows: All concentration data below the QL used for the analysis shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.
- b. Weekly Average (Outfall 101) – Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in Part I.B.1 shall be determined as follows: All concentration data below the QL used for the analysis shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL used for the analysis, then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

- c. Daily Maximum (Outfalls 001, 008, and 102) – Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in Part I.B.1 shall be determined as follows: All concentration data below the QL used for the analysis shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.
- d. Single Datum – Any single datum required shall be reported as "<QL" if it is less than the QL used for the analysis. Otherwise the numerical value shall be reported.
- e. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
- f. Nutrient reporting calculations – The reporting calculations below shall be performed using the concentration monitoring required by VPGC, LLC's Nutrient General Permit, VAN010009.

For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formula:

$$AC_{avg} - YTD = ( \sum_{(Jan-current\ month)} MC_{avg} ) \div ( \# \text{ of months} )$$

where:

$AC_{avg} - YTD$  = calendar year-to-date average concentration (mg/L)

$MC_{avg}$  = monthly average concentration (mg/L)

The TN and TP average concentrations (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10th of the following year. These values shall be calculated in accordance with the following formula:

$$AC_{avg} = ( \sum_{(Jan-Dec)} MC_{avg} ) \div 12$$

where:

$AC_{avg}$  = calendar year average concentration (mg/L)

$MC_{avg}$  = monthly average concentration (mg/L)

For TP, all daily concentration data below the quantification level (QL) for the analytical method used shall be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For TN, if none of the daily concentration data for the respective species (i.e., TKN, Nitrates/Nitrites) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

## C. WHOLE EFFLUENT TOXICITY (WET) REQUIREMENTS

### 1. 1.10 MGD Flow Tier

- a. In accordance with the schedule in Part I.C.1.f and Part I.C.1.g, the permittee shall conduct annual chronic toxicity tests for *Pimephales promelas* and quarterly acute and chronic toxicity tests for *Ceriodaphnia dubia* using 24-hour flow-proportioned composite samples of final effluent collected from Outfall 001.

The acute tests shall be a 48-Hour Static Acute test using *Ceriodaphnia dubia*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, with a minimum of 4 replicates per dilution and a minimum of 5 organisms per replicate for calculation of a valid No Observed Adverse Effect Concentration (NOAEC). The NOAEC should be determined by hypothesis testing. The LC<sub>50</sub> should also be determined, noted, and submitted in the required test report. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.

The chronic tests shall be a Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia* and a Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, in order to determine the No Observed Effect Concentration (NOEC) for survival and reproduction or growth. The WET limit NOEC of 47% must be represented by a dilution, which must also be the middle dilution if the WET limit NOEC is other than 100%. Express the results as chronic Toxicity Units (TU<sub>c</sub>) by dividing 100/NOEC. Report the LC<sub>50</sub> for each chronic test at the 48-hour point, and the IC<sub>25</sub>, if calculable, with the NOEC in the required test report.

- b. Should chronic WET monitoring of *Pimephales promelas* result in a 48-hour LC<sub>50</sub> ≤ 100% effluent, the permittee shall commence acute toxicity tests using 24-hour flow-proportioned composite samples of final effluent collected from Outfall 001. This monitoring shall be in accordance with the acute toxicity WET test report schedule included in Part I.C.1.h. The acute tests shall be a 48-Hour Static Acute test using *Pimephales promelas*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, with a minimum of 4 replicates per dilution and a minimum of 5 organisms per replicate for calculation of a valid No Observed Adverse Effect Concentration (NOAEC). The LC<sub>50</sub> should also be determined, noted, and submitted in the required test report. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.
- c. During the term of the permit, the permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- d. The test dilutions shall be able to determine compliance with the following endpoint:

Acute NOAEC of 100%
- e. The permit may be modified or revoked and reissued to include pollutant-specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant-specific limits must control the toxicity of the effluent.

- f. The permittee shall report the results on the DMR and supply 1 copy of the test report for the quarterly acute and chronic *Ceriodaphnia dubia* tests specified in Part I.C.1.a in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Quarter	April 1 – June 30, 2015	July 10, 2015
2 <sup>nd</sup> Quarter	July 1 – September 30, 2015	October 10, 2015
3 <sup>rd</sup> Quarter	October 1 – December 31, 2015	January 10, 2016
4 <sup>th</sup> Quarter	January 1 – March 31, 2016	April 10, 2016
5 <sup>th</sup> Quarter	April 1 – June 30, 2016	July 10, 2016
6 <sup>th</sup> Quarter	July 1 – September 30, 2016	October 10, 2016
7 <sup>th</sup> Quarter	October 1 – December 31, 2016	January 10, 2017
8 <sup>th</sup> Quarter	January 1 – March 31, 2017	April 10, 2017
9 <sup>th</sup> Quarter	April 1 – June 30, 2017	July 10, 2017
10 <sup>th</sup> Quarter	July 1 – September 30, 2017	October 10, 2017
11 <sup>th</sup> Quarter	October 1 – December 31, 2017	January 10, 2018
12 <sup>th</sup> Quarter	January 1 – March 31, 2018	April 10, 2018
13 <sup>th</sup> Quarter	April 1 – June 30, 2018	July 10, 2018
14 <sup>th</sup> Quarter	July 1 – September 30, 2018	October 10, 2018
15 <sup>th</sup> Quarter	October 1 – December 31, 2018	January 10, 2019
16 <sup>th</sup> Quarter	January 1 – March 31, 2019	April 10, 2019
17 <sup>th</sup> Quarter	April 1 – June 30, 2019	July 10, 2019
18 <sup>th</sup> Quarter	July 1 – September 30, 2019	October 10, 2019
19 <sup>th</sup> Quarter	October 1 – December 31, 2019	January 10, 2020

- g. The permittee shall report the results on the DMR and supply 1 copy of the test report for the annual chronic *Pimephales promelas* tests specified in Part I.C.1.a in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Annual	March 1 – December 31, 2015	January 10, 2016
2 <sup>nd</sup> Annual	January 1 – December 31, 2016	January 10, 2017
3 <sup>rd</sup> Annual	January 1 – December 31, 2017	January 10, 2018
4 <sup>th</sup> Annual	January 1 – December 31, 2018	January 10, 2019
5 <sup>th</sup> Annual	January 1 – December 31, 2019	January 10, 2020

- h. The permittee shall supply 1 copy of the test report for the acute toxicity tests specified in Part I.C.1.b in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Quarter	The first full calendar quarter following a determination of a 48-Hour $LC_{50} \leq 100\%$ in the chronic test	By the 10 <sup>th</sup> day of the month following the testing period
Quarterly thereafter	Every calendar quarter following the previous quarter	By the 10 <sup>th</sup> day of the month following the testing period

## 2. 1.52 MGD Flow Tier

- a. In accordance with the schedule in Part I.C.2.f and Part I.C.2.g, the permittee shall conduct annual chronic toxicity tests for *Pimephales promelas* and quarterly acute and chronic toxicity tests for *Ceriodaphnia dubia* using 24-hour flow-proportioned composite samples of final effluent collected from Outfall 001.

The acute tests shall be a 48-Hour Static Acute test using *Ceriodaphnia dubia*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, with a minimum of 4 replicates per dilution and a minimum of 5 organisms per replicate for calculation of a valid No Observed Adverse Effect Concentration (NOAEC). The NOAEC should be determined by hypothesis testing. The LC<sub>50</sub> should also be determined, noted, and submitted in the required test report. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.

The chronic tests shall be a Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia* and a Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, in order to determine the No Observed Effect Concentration (NOEC) for survival and reproduction or growth. The WET limit NOEC of 51% must be represented by a dilution, which must also be the middle dilution if the WET limit NOEC is other than 100%. Express the results as chronic Toxicity Units (TU<sub>c</sub>) by dividing 100/NOEC. Report the LC<sub>50</sub> for each chronic test at the 48-hour point, and the IC<sub>25</sub>, if calculable, with the NOEC in the required test report.

- b. Should chronic WET monitoring of *Pimephales promelas* result in a 48-hour LC<sub>50</sub> ≤ 100% effluent, the permittee shall commence acute toxicity tests using 24-hour flow-proportioned composite samples of final effluent collected from Outfall 001. This monitoring shall be in accordance with the acute toxicity WET test report schedule included in Part I.C.1.h. The acute tests shall be a 48-Hour Static Acute test using *Pimephales promelas*. Each test shall be performed with a minimum of 5 dilutions, derived geometrically, with a minimum of 4 replicates per dilution and a minimum of 5 organisms per replicate for calculation of a valid No Observed Adverse Effect Concentration (NOAEC). The LC<sub>50</sub> should also be determined, noted, and submitted in the required test report. Tests in which control survival is less than 90% are not acceptable. Any retest of an unacceptable test must be performed within the same testing period as the unacceptable test.
- c. During the term of the permit, the permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- d. The test dilutions shall be able to determine compliance with the following endpoint:

Acute NOAEC of 100%
- e. The permit may be modified or revoked and reissued to include pollutant-specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant-specific limits must control the toxicity of the effluent.

- f. The permittee shall report the results on the DMR and supply 1 copy of the test report for the quarterly acute and chronic *Ceriodaphnia dubia* tests specified in Part I.C.2.a. in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Quarter	The first calendar quarter after Part I.A.2. becomes effective	Due the 10 <sup>th</sup> of the month after the test period ends
Quarterly thereafter	Subsequent calendar quarters after the first calendar quarter	Due the 10 <sup>th</sup> of the month after the test period ends

- g. The permittee shall report the results on the DMR and supply 1 copy of the test report for the annual chronic *Pimephales promelas* tests specified in Part I.C.2.a in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Annual	The first calendar year after Part I.A.2. becomes effective	Due the 10 <sup>th</sup> of the month after the test period ends
Annually thereafter	Subsequent calendar years after the first calendar year	Due the 10 <sup>th</sup> of the month after the test period ends

- h. The permittee shall supply 1 copy of the test report for the acute toxicity tests specified in Part I.C.2.b in accordance with the following schedule:

<u>Monitoring Period</u>	<u>Testing Period</u>	<u>Report Submittal Dates</u>
1 <sup>st</sup> Quarter	The first full calendar quarter following a determination of a 48-Hour $LC_{50} \leq 100\%$ in the chronic test	By the 10 <sup>th</sup> day of the month following the testing period
Quarterly thereafter	Every calendar quarter following the previous quarter	By the 10 <sup>th</sup> day of the month following the testing period

#### D. OTHER REQUIREMENTS AND SPECIAL CONDITIONS

1. 95% Capacity Reopener (Outfalls 101 and 102) – A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the DEQ-Valley Regional Office when the monthly average influent flow to the wastewater treatment facility reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ-Valley Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.
2. Materials Handling/Storage – Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

3. Operation and Maintenance (O&M) Manual Requirement – The permittee shall maintain a current O&M Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and (for sewage treatment plants) Sewage Collection and Treatment Regulations, 9VAC25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M Manual available to DEQ personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ-Valley Regional Office for review and approval.

The O&M Manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, stormwater, and sludge samples;
  - b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
  - c. Discussion of Best Management Practices, if applicable;
  - d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.D.2 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;
  - e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
  - f. Plan for the management and/or disposal of waste solids and residues;
  - g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
  - h. List of facility, local, and state emergency contacts; procedures for reporting and responding to any spills/overflows/treatment works upsets; and
  - i. Procedures for documenting compliance with the permit requirement that there shall be no discharge of floating solids or visible foam in other than trace amounts.
4. Certificate to Construct (CTC) / Certificate to Operate (CTO) Requirement (Outfall 101) – The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ-Valley Regional Office. The design plans shall be submitted by the design engineer and owner to the DEQ-Valley Regional Office prior to construction of sewage treatment works and operation of the sewage treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.
  5. Concept Engineering Report (CER) Requirement (Outfall 102) – Prior to constructing any industrial wastewater treatment works, the permittee shall submit a CER to the DEQ-Valley Regional Office. DEQ approval shall be secured prior to constructing any wastewater treatment works. The permittee shall construct the wastewater treatment works in accordance with the approved CER. No later than 14 days following initiation of operation of any project for which a CER has been approved, written notification shall be submitted to the DEQ-Valley Regional Office certifying that, based on an inspection of the project, construction was completed in accordance with the approved CER. The written notification shall be certified by a professional engineer licensed in the Commonwealth of Virginia or signed in accordance with Part II.K of this permit. The installed wastewater treatment works shall be operated to achieve design treatment and effluent concentrations. Approval by DEQ does not relieve the owner of the responsibility for the correction of design and/or operational deficiencies. Noncompliance with the CER shall be deemed a violation of this permit.



Upon approval of a CER for the installation of nutrient removal technology, DEQ staff shall initiate modification, or alternatively, revocation and reissuance, of this permit, to include annual concentration limits based on the technology proposed in the CER.

6. Sludge Management Plan (SMP) Requirement (Outfall 101) – The permittee shall conduct all sewage sludge use or disposal activities in accordance with the SMP approved with the reissuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the SMP becomes an enforceable part of the permit. This permit may be modified or, alternatively, revoked and reissued to incorporate limitations/conditions necessitated by substantive changes in sewage sludge use or disposal practices.
7. Licensed Operator Requirement (Outfall 102) – The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the Board for Waterworks and Wastewater Works Operators and Onsite Sewage System Professionals Regulations. The permittee shall notify the DEQ-Valley Regional Office in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.
8. Reliability Class (Outfall 101) – The permitted treatment works shall meet Reliability Class II.
9. Water Quality Criteria Monitoring – The permittee shall monitor the effluent at Outfall 001 for the substances noted in Attachment A of this permit according to the indicated analysis number, quantification level, sample type and frequency. Monitoring shall be initiated after the start of the third year from the permit's effective date. Using Attachment A as the reporting form, the data shall be submitted the next permit reissuance application which is due at least 180 days prior to the expiration date of this permit. Monitoring and analyses shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. Methods other than those specified in Attachment A may be used with prior notification to and approval from DEQ. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A.
10. Treatment Works Closure Plan – If the permittee plans an expansion or upgrade to replace the existing treatment works, or if the facility is permanently closed, the permittee shall submit to the DEQ-Valley Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 days following closure completion, the permittee shall submit to the DEQ-Valley Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

11. Reopeners – This permit may be modified or, alternatively, revoked and reissued:

- a. If any approved waste load allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes waste load allocations, limits or conditions on the facility that are not consistent with the permit requirements; or
- b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade; or
- c. To include new or alternative nutrient limitations and/or monitoring requirements, should:
  - (1) The State Water Control Board adopt nutrient standards for the water body receiving the discharge, or
  - (2) A future water quality regulation or statute require new or alternative nutrient control; or
- d. If any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

12. The annual average concentration limitations for TN and/or TP are suspended during any calendar year in which the facility is considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level, provided that the following conditions have also been met:

- a. The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;
- b. The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations; and
- c. The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.

The annual average concentration limitations for TN and/or TP, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by Part I.D.12.b.

13. Effluent Monitoring Frequencies (Outfall 001) – If the facility permitted herein is issued a Notice of Violation for the parameter listed below, then the following effluent monitoring frequencies shall become effective upon written notice from DEQ and remain in effect until permit expiration.

<u>Parameter</u>	<u>Monitoring Frequency</u>
BOD <sub>5</sub>	1/Week

No other effluent limitations or monitoring requirements are affected by this special condition.

14. Notification Levels – The permittee shall notify the DEQ-Valley Regional Office as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
  - (1) 100 µg/L;
  - (2) 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and 1 mg/L for antimony;
  - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
  - (4) The level established by the Board.

- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
  - (1) 500 µg/L;
  - (2) 1 mg/L for antimony;
  - (3) Ten times the maximum concentration value reported for that pollutant in the permit application;
  - or
  - (4) The level established by the Board.

#### 15. Nutrient Monitoring Requirements for Discharges of Industrial Stormwater

- a. The permittee shall incorporate measures and controls into the SWPPP required by Part I.E.2 that are consistent with the assumptions and requirements of the total maximum daily load (TMDL) for Muddy Creek. The facility's SWPPP shall specifically address any conditions or requirements included in the TMDL that are applicable to discharges from the facility. If the TMDL establishes a specific numeric wasteload allocation that applies to discharges from the facility, the owner shall perform any required monitoring in accordance with Part I.A.8, and implement control measures designed to meet that allocation.
- b. The permittee shall monitor the facility's industrial stormwater discharges for TSS, TN, and Total TP to characterize the contributions from their facility's specific industrial sector for these parameters. Samples shall be collected during each of the first four monitoring periods (i.e., the first two years of permit coverage) or until a minimum of four semiannual samples have been collected. Monitoring periods are specified in Part I.A.8. Samples shall be collected and analyzed in accordance with Part I.A.8 and Part I.E.1. Monitoring results shall be reported in accordance with Part I.A.8 and Part II.C, and retained in accordance with Part II.B.
- c. Chesapeake Bay TMDL Wasteload Allocations and Chesapeake Bay TMDL Action Plans
  - (1) EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations.

Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information, and TP, TN, and TSS loading values from the Northern Virginia Planning District Commission (NVPDC) Guidebook for Screening Urban Nonpoint Pollution Management Strategies, prepared for the Metropolitan Washington Council of Governments. Annandale, VA. November, 1979. The loading values used were as follows:

TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr  
TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr  
TSS - High (80%) imperviousness industrial; 440 lb/ac/yr

The actual facility area information, and the TP, TN and TSS data collected for this permit will be used by DEQ to quantify the nutrient and sediment loads from VPDES permitted industrial stormwater facilities, and will be submitted to EPA to aid them in further refinements to their Chesapeake Bay TMDL model. The loading information will also be used by DEQ to determine any additional load reductions needed for industrial stormwater facilities for the next reissuance of this permit.

- (2) Data Analysis and Chesapeake Bay TMDL Action Plans – The permittee shall analyze the nutrient and sediment data collected in accordance with Part I.D.15.b to determine if additional action is needed for this permit term. The permittee shall average the data collected at the facility for each of the pollutants of concern (POC) (e.g., TP, TN and TSS) and compare the results to the loading values for TP, TN and TSS presented in Part I.D.15.c.(1). To calculate the facility loadings, the permittee shall use either the actual annual average rainfall data for the facility location (in inches/year) or the Virginia annual average rainfall of 44.3 inches/year.

The following formula or a site specific, DEQ-approved calculation shall be used to determine the loading value:

$$L = (0.226 \times R \times C) \quad \text{Equation (1)}$$

where:

L = the Pollutant of Concern (POC) loading value (lb/acre/year)  
 C = the POC average concentration of all facility samples (mg/L)  
 0.226 = unit conversion factor  
 R = annual runoff (in/yr), calculated as:  $R = P \times P_j \times R_v$   
 where:

P = annual rainfall (in/yr) [use the Virginia annual average of 44.3 in/yr, or site specific annual rainfall for your area of the State]

$P_j$  = the fraction of annual events that produce runoff (usually 0.9)

$R_v$  = the runoff coefficient, which can be expressed as:  $R_v = 0.05 + (0.9 \times I_a)$

$I_a$  = the impervious fraction [the ratio of facility impervious area to the total facility area]

or,  $I_a = \text{AREA}_{\text{IMPERVIOUS}} / \text{AREA}_{\text{TOTAL}}$

Substituting in Equation (1):

$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C \quad \text{Equation (2)}$$

- (3) (a) If the calculated facility loading value for TP, TN or TSS is less than the corresponding loading value presented in Part I.D.15.c.(1), then the calculations demonstrating that no reduction is necessary shall be submitted within 90 days from the end of the final monitoring period. The calculations shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area.
- (b) If the calculated facility loading value for TP, TN or TSS exceeds the corresponding loading value presented in Part I.D.15.c.(1), then the permittee shall develop and submit a Chesapeake Bay TMDL Action Plan to DEQ for review and approval. The plan shall include a site map with the total site area, the areas associated with industrial activity and the total impervious area. The permittee shall implement the applicable elements of the approved plan over the remaining term of this permit and achieve all the necessary reductions by June 30, 2024. The plan shall be submitted within 90 days from the end of the final monitoring period. The action plan shall include:
- (i) A determination of the total pollutant load reductions for TP, TN and TSS (as appropriate) necessary to reduce the annual loads from industrial activities. This shall be determined by calculating the difference between the loading values listed in Part I.D.15.c.(1), and the average of the sampling data for TP, TN or TSS (as appropriate) for the entire facility. The reduction applies to the total difference calculated for each pollutant of concern;

- (ii) The means and methods, such as management practices and retrofit programs, that will be utilized to meet the required reductions determined in Part I.D.15.c.(3)(b)(i), and a schedule to achieve those reductions by June 30, 2024. The schedule should include annual benchmarks to demonstrate the ongoing progress in meeting those reductions;
    - (iii) The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the required reductions.
  - (4) Permittees required to develop and implement a Chesapeake Bay TMDL Action Plan shall submit an annual report to the department by June 30<sup>th</sup> of each year describing the progress in meeting the required reductions.
- 16. Expansion of facilities that discharge to waters subject to the Chesapeake Bay TMDL –Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.
  - a. For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after July 1, 2014, the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the VPDES construction stormwater general permit regulation (9VAC25-880) is exempt from this requirement,
  - b. The permittee may use the VSMP water quality design criteria to meet the requirements of subdivision a of this subsection. Under this criteria, the TP load shall not exceed the greater of:
    - (1) The TP load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity; or
    - (2) 0.41 pounds per acre per yearCompliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the board. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc>.
  - c. The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the no net increase requirement.

## E. STORMWATER MANAGEMENT CONDITIONS

### 1. General Stormwater Special Conditions

#### a. Sample Type

For all stormwater monitoring required in Part I.A. or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72-hour storm event interval is waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first three hours of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first

30 minutes was impracticable. If stormwater discharges associated with industrial activity commingle with process or non-process water, then where practicable permittees must attempt to sample the stormwater discharge before it mixes with the non-stormwater discharge.

b. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall total (in inches) of the storm event which generated the sampled discharge; and
- (3) The duration between the storm event sampled and the end of the previous measurable storm event.

c. Sampling Waiver

When a permittee is unable to collect stormwater samples required in Part I.A. or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period. Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

d. Representative outfalls – substantially identical discharges

If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s). The substantially identical outfall monitoring provisions apply to quarterly visual monitoring, benchmark monitoring and impaired waters monitoring. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee shall include the following information in the SWPPP:

- (1) The locations of the outfalls;
- (2) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data, where available; and,
- (3) Estimates of the size of the drainage area (in square feet) for each of the outfalls.

e. Quarterly Visual Examination of Stormwater Quality

- (1) The permittee must perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II.K of this permit.
- (2) Visual examinations must be made of samples collected in accordance with Part I.E.1.a (Sample Type). The examination must document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples.
- (3) The visual examination reports must be maintained on-site with the Stormwater Pollution Prevention Plan (SWPPP). The report must include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality

of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

f. Authorized Non-Stormwater Discharges

(1) The following non-stormwater discharges are authorized by this permit:

- (a) Discharges from fire fighting activities;
- (b) Fire hydrant flushings;
- (c) Potable water including water line flushings;
- (d) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- (e) Irrigation drainage;
- (f) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
- (h) Routine external building washdown which does not use detergents;
- (i) Uncontaminated ground water or spring water;
- (j) Foundation or footing drains where flows are not contaminated with process materials; and
- (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

(2) All other non-stormwater discharges are not authorized and shall either be eliminated or covered under a separate VPDES permit.

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharge(s) from the facility shall be prevented or minimized in accordance with the SWPPP for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

- (1) The permittee is required to notify the Department in accordance with the requirements of Part II.G as soon as he or she has knowledge of the discharge;
- (2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
- (3) The SWPPP required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

h. Water Quality Protection

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards.

i. Corrective actions

(1) Data exceeding benchmark concentration values, if applicable

- (a) If the benchmark monitoring result exceeds the benchmark concentration value for that parameter, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 30 days after an exceedance is discovered. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.E.2.c (Maintenance), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Valley Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a

schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedance is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. Any control measure modifications shall be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable control measure or implement additional control measures.

- (b) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:
  - (i) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
  - (ii) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and
  - (iii) The permittee notifies the DEQ Valley Regional Office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

(2) Corrective actions

The permittee shall take corrective action whenever:

- (a) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
- (b) There is any exceedance of an effluent limitation (including coal pile runoff), or TMDL wasteload allocation; or
- (c) The DEQ-Valley Regional Office determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee shall review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP shall be completed within 30 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.E.2.c.(Maintenance)), implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Valley Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

Any corrective actions taken shall be documented and retained with the SWPPP. Reports of corrective actions shall be signed in accordance with Part II.K.



(3) Follow-up reporting.

If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the DEQ-Valley Regional Office determines that discharges from the facility are causing or contributing to an exceedance of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with the above Part I.E.1.i.(2) (Corrective actions). Within 30 calendar days of implementing the relevant corrective action(s) an exceedance report shall be submitted to the DEQ Valley Regional Office. The following information shall be included in the report: permit number; facility name, address and location; receiving water; monitoring data from this event; an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number.

j. Additional Requirements for Salt Storage

Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be collected and contained within a bermed basin lined with concrete or other impermeable materials., or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to state waters.

2. Stormwater Pollution Prevention Plan

A SWPPP for the facility was required to be developed and implemented under the previous permit. The existing SWPPP shall be reviewed and modified, as appropriate, to conform to the requirements of this section. Permittees shall implement the provisions of the SWPPP as a condition of this permit.

The SWPPP requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act, or best management practices (BMP) programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of Part I.E.2.b (Contents of the Plan). All plans incorporated by reference into the SWPPP become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of Part I.E.2.b the permittee shall develop the missing SWPPP elements and include them in the required plan.

a. Deadlines for Plan Preparation and Compliance

(1) The facility shall review and update the existing plan as expeditiously as practicable, but no later than 90 days from the effective date of the permit. Verification of compliance shall be provided, in writing, within 10 days of the above deadline.

(2) Measures That Require Construction.

In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and/or temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

b. Contents of the Plan

The contents of the SWPPP shall comply with the requirements listed below and those in Part I.E.3. The plan shall include, at a minimum, the following items:

(1) Pollution Prevention Team

The plan shall identify the staff individuals by name or title who comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.

(2) Site Description

The SWPPP shall include the following:

(a) Activities at the Facility.

A description of the nature of the industrial activities at the facility.

(b) General Location Map

A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.

(c) Site Map

A site map identifying the following:

(i) The boundaries of the property and the size of the property (in acres);

(ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);

(iii) Locations of all stormwater conveyances including ditches, pipes, swales, and inlets, and the directions of stormwater flow (use arrows to show which ways stormwater will flow);

(iv) Locations of all existing structural and source control measures, including BMPs;

(v) Locations of all surface water bodies, including wetlands;

(vi) Locations of potential pollutant sources identified under Part I.E.2.b.(3) (Summary of potential pollutant sources);

(vii) Locations where significant spills or leaks identified under Part I.E.2.b.(4) (Spills and leaks) have occurred;

(viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and cleaning areas; loading and unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;

(ix) Locations of stormwater outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the stormwater from the facility discharges to them;

(x) Location and description of all non-stormwater discharges;

(xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes; and

(xii) Locations and sources of runoff to the site from adjacent property where the runoff contains significant quantities of pollutants; and

(xiii) Locations of all stormwater monitoring points.

(d) Receiving Waters and Wetlands

The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator, and the receiving water to which the MS4 discharges.

(3) Summary of Potential Pollutant Sources

The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste

products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:

(a) Activities in the area

A list of the industrial activities exposed to stormwater (e.g., material storage, equipment fueling and cleaning, cutting steel beams);

(b) Pollutants

A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil-zinc, sulfuric acid, cleaning solvents, etc.) associated with each industrial activity. The pollutant list shall include all significant materials handled, treated, stored or disposed that have been exposed to stormwater in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.

(4) Spills and Leaks

The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities.

(5) Sampling Data

The plan shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.

(6) Stormwater Controls

(a) Control measures shall be implemented for all the areas identified in Part I.E.2 b.(3)

(Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. Regulated stormwater discharges from the facility include stormwater runoff that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location and implementation of all control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:

- (i) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
- (ii) Control measures generally shall be used in combination with each other for most effective water quality protection;
- (iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
- (iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);
- (v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- (vi) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
- (vii) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

(b) Nonnumeric technology-based effluent limits

The permittee shall implement the following types of control measures to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no storage piles containing salt).

## (i) Good Housekeeping

The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas, loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.

## (ii) Eliminating and Minimizing Exposure

To the extent practicable, manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120.E, thereby eliminating the need to have a permit.

## (iii) Preventive Maintenance

The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid situations that could result in leaks, spills and other releases of pollutants in stormwater discharge from the facility. This program is in addition to the specific control measure maintenance required under Part I.E 2.c (Maintenance).

## (iv) Spill Prevention and Response Procedures

The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:

- (A) Preventive measures, such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- (B) Response procedures, including notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the Pollution Prevention Team;
- (C) Procedures for plainly labeling containers (e.g., "used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; and
- (D) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.

## (v) Routine Facility Inspections

Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater. These inspections are in addition to, or as part of, the comprehensive site evaluation required under Part I.E.2.d. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. At least once each calendar year, the routine facility inspection must be conducted during a period when a stormwater discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP, and shall include at a minimum:

- (A) The inspection date and time;
- (B) The name and signature of the inspector(s);
- (C) Weather information and a description of any discharges occurring at the time of the inspection;
- (D) Any previously unidentified discharges of pollutants from the site;
- (E) Any control measures needing maintenance or repairs;
- (F) Any failed control measures that need replacement;
- (G) Any incidents of noncompliance observed; and
- (H) Any additional control measures needed to comply with the permit requirements.

(vi) Employee Training

The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training, and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(vii) Sediment and Erosion Control

The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and stabilization control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(viii) Management of Runoff.

The plan shall describe the stormwater runoff management practices (i.e., permanent structural control measures) for the facility. These types of control measures are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site.

Structural control measures may require a separate permit under Section 404 of the CWA and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.

(ix) Dust suppression and vehicle tracking of industrial materials.

The permittee shall implement control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials. Stormwater collected on site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water and uncontaminated reuse water may also be used for this purpose. There shall be no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles.

c. Maintenance

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all control measures, and shall include a description of the back-up practices that are in place should a runoff event occur while a control measure is off-line. The effectiveness of nonstructural control measure shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually during active operation (i.e., during a stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

If site inspections required by Part I.E.2.b.(6)(b)(v) (Routine Facility Inspections) or Part I.E.2.d (Comprehensive Site Compliance Evaluation) identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, date(s) for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation

The permittee shall conduct comprehensive site compliance evaluations at least once each calendar year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures. The personnel conducting the evaluations may be either facility employees or outside personnel hired by the facility.

(1) Scope of the Compliance Evaluation.

Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in Part I E.2.b.(3) (Summary of potential pollutant sources). The personnel shall evaluate:

- (a) Industrial materials, residue or trash that may have or could come into contact with stormwater;
- (b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
- (c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
- (d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
- (e) Evidence of, or the potential for, pollutants entering the drainage system;
- (f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
- (g) Review of stormwater related training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of control measures, including BMPs;
- (h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.

- (2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by Part I.E.2.b.(2)(c); revise the description of controls required by Part I.E.2.b.(6) to include additional or modified control measures designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing control measures need to be modified or if additional control measures are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not

more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department;

(3) Compliance Evaluation Report

A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in Part I.E.2 d.(1) (a) through (h) above. Observations shall include such things as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of control measures that need to be maintained or repaired; location(s) of failed control measures that need replacement; and location(s) where additional control measures are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part II.K and maintained with the SWPPP.

(4) Where compliance evaluation schedules overlap with routine inspections required under Part I E.2.b.(6)(b)(v) (Routine facility inspections), the annual compliance evaluation may be used as one of the routine inspections.

e. Signature and Plan Review

(1) Signature and location

The SWPPP, including revisions to the SWPPP to document any corrective actions taken as required by Part I.E.1.(i) (Corrective Actions), shall be signed in accordance with Part II.K, dated, and retained on-site at the facility covered by this permit in accordance with Part II.B.2. All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation.

(2) Availability

The permittee shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to the Department, EPA or the operator of an MS4 receiving discharges from the site at the time of an onsite inspection or upon request.

(3) Required Modifications.

The permittee shall modify the SWPPP whenever necessary to address any corrective actions required by Part I.E.1.i.(1)(Data exceeding benchmark concentration values) or Part I.E.1.i (Corrective actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part I.E.1.(i)(1) and Part I.E.1(i), and shall be signed and dated in accordance with Part II.K (Signatory Requirements).

The Director may notify the permittee at any time that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met, and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.

f. Maintaining an Updated SWPPP

(1) The permittee shall review and amend the SWPPP as appropriate whenever:

- (a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility;
- (b) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs;
- (c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
- (d) There is a spill, leak or other release at the facility; or
- (e) There is an unauthorized discharge from the facility.

- (2) SWPPP modifications shall be made within 30 calendar days after discovery, observation or event requiring a SWPPP modification. Implementation of new or modified control measures (distinct from regular preventive maintenance of existing control measures described in Part I E.2.b.(6)(b)(iii) (Preventative Maintenance) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.
- (3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part II.G of this permit.

### 3. Sector-Specific Stormwater Pollution Prevention Plan Requirements

In addition to the requirements of Part I.E.1 and Part I.E.2, the SWPPP shall include, at a minimum, the following items:

#### a. Site Description

##### (1) Site Map

The site map shall identify the locations of the following activities if they are exposed to precipitation or surface runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

##### (2) Summary of Potential Pollutant Sources

In addition to food and kindred products processing-related industrial activities, the plan must also describe application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides, etc.) used on plant grounds.

#### b. Stormwater Controls

##### (1) Routine Facility Inspections

At a minimum, the following areas, where the potential for exposure to stormwater exists, shall be inspected on a quarterly basis: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

##### (2) Employee Training

The employee training program shall also address pest control.



DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY MONITORING

## OUTFALL NO. 001

All analyses shall be in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

A listing of Virginia Environmental Laboratory Accreditation Program (VELAP) certified and/or accredited laboratories can be found at the following website:

<http://www.dgs.state.va.us/DivisionofConsolidatedLaboratoryServices/Services/EnvironmentalLaboratoryCertification/tabid/1059/Default.aspx>

Please be advised that additional water quality analyses may be necessary and/or required for permitting purposes.

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL <sup>(1)</sup>	REPORTING RESULTS	SAMPLE TYPE <sup>(2)</sup>	SAMPLE FREQUENCY
MISCELLANEOUS						
18496-25-8	Sulfide, dissolved <sup>(4)</sup>	(3)	100		G or C	1/5 YR

---

Name of Principal Executive Officer or Authorized Agent/Title

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Signature of Principal Executive Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to \$10,000 and or maximum imprisonment of between 6 months and 5 years.)

DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY MONITORING

**Footnotes to Water Quality Monitoring Attachment A**

- (1) Quantification level (QL) means the minimum levels, concentrations, or quantities of a target variable (e.g. target analyte) that can be reported with a specified degree of confidence in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information (i.e. laboratory certificates of analysis) shall be submitted to document that the required quantification level has been attained.

- (2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

- (3) A specific analytical method is not specified; however, an appropriate method to meet the QL shall be selected from (i) any approved method presented in 40 CFR Part 136 or (ii) any alternative EPA approved method, provided that all analyses are in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
- (4) Dissolved sulfide may be measured by the total sulfide analysis. The total sulfide analytical test QL shall be less than or equal to the dissolved sulfide method QL listed above. If the result of the total sulfide analysis is less than the analytical test QL, dissolved sulfide can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

1. Samples and measurements taken as required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
  - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
  - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
  - c. Samples taken shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records

1. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after the required monitoring period, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality  
Valley Regional Office  
P.O. Box 3000  
Harrisonburg, Virginia 22801

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;
7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

**I. Reports of Noncompliance**

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
  - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II.I.1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

**NOTE: The immediate (within 24 hours) reports required in Parts II.G, H and I may be made to the Department's Valley Regional Office at (540) 574-7892 (voice), (540) 574-7878 (fax), or online at <http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx>. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.**

**J. Notice of Planned Changes**

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
    - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
  - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
  - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

**K. Signatory Requirements**

1. Applications. All permit applications shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part II.K.1;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II.K.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II.K.1 or 2 shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**L. Duty to Comply**

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U), and "upset" (Part II.V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II.U.2 and U.3.
2. Notice
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

### 3. Prohibition of bypass

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
  - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (3) The permittee submitted notices as required under Part II.U.2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

### V. Upset

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II.I; and
  - d. The permittee complied with any remedial measures required under Part II.S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

### W. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

### X. Permit Actions

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.



Y. Transfer of Permits

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a minor modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II.Y.1, this permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.